DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020097 Address: 333 Burma Road **Date Inspected:** 04-Feb-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr. Oui Wen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Segment

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Bay 14

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) repair welding of weld joint SEG3020D-052 located on Floor Beam to Bottom Plate of OBG Segment 14W. ZPMC Welder is identified as 066038. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G (2F) – FCM – Repair, which is used as per Critical Welding Repair (CWR) B-CWR-2734-R1.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3015D-002 located on Deck Panel Diaphragm to Floor Beam of OBG Segment 13CW. ZPMC Welder is identified as 067876 and 201583. ZPMC Quality Control (QC) is identified as Mr. Qui Wen. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

SMAW welding of weld joint SEG3014F-008 located on Deck Panel Diaphragm to Longitudinal Diaphragm of OBG Segment 13BW. ZPMC Welder is identified as 066674. ZPMC Quality Control (QC) is identified as Mr. Qui Wen. The welding variables recorded by QC appeared to comply with the Applicable

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WPS-B-P-2212-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3014C-009 located on Deck Panel Diaphragm to Longitudinal Diaphragm of OBG Segment 13BW. ZPMC Welder is identified as 037840. ZPMC Quality Control (QC) is identified as Mr. Qui Wenn. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3013AH-025 located on edge plate and K-plate of OBG Segment 13AW. ZPMC Welder is identified as 066002. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G (3F) – FCM – Repair, which is used as per Welding Repair Report (WRR) B-WRR-20171.

SMAW welding of weld joint SEG3013AH-031 located on edge plate of OBG Segment 13AW. ZPMC Welder is identified as 066261. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G (2F) – FCM – Repair, which is used as per Welding Repair Report (WRR) B-WRR-20174.

SMAW welding of weld joint SEG3013P-058 located on K-plate of OBG Segment 13AW. ZPMC Welder is identified as 037748. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-4G (4F) – FCM – Repair, which is used as per Welding Repair Report (WRR) B-WRR-20172.

SMAW welding of weld joint DP3174-001-036 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 067707. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

SMAW welding of weld joint DP3173-001-040 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 037779. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

SMAW welding of weld joint DP3173-001-069 and 074 located on Deck Panel U-ribs to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 037779. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2213-Tc-U4b-FCM-1.

SMAW welding of weld joint DP3173-001-038 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 069493. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

SMAW welding of weld joint DP3173-001-036 and DP3174-001-038 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 067904. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

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SMAW welding of weld joint DP3175-001-044 and 046 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welders are identified as 067707 and 067904. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

Description of VT Observation:

During the Quality Assurance random visual inspection of welds located on Segment 13AW at panel point 119 counter weight side, this Quality Assurance Inspector (QA) observed that ZMPC personnel performed welding on RS stiffener re-welding because of wrong place fit-up error.

- This weld is a Complete Joint Penetration (CJP) weld joining the RS-Stiffener to Bottom Plate.
- The shop drawing numbers are identified as SEG3013J. This weld is designated as Seismic Performance Critical Member (SPCM).
- OBG segment 13AW is located West Side of Bay 14 area. The ZPMC QC is identified as Mr. Zhang Lin. See the attaché picture.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar, Vibin	Quality Assurance Inspector
Reviewed By:	Patel, Hiranch	QA Reviewer